# CS 255 System Design Document Template

This template lays out all the different sections that you need to complete for Project Two. Each section has guidance to prompt your thinking. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead the goal is to complete each section based on what your client’s needs are. Remove this note when you are finished, and replace all bracketed text with the relevant information.

## UML Diagrams

### UML Use Case Diagram

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### UML Activity Diagrams

 

### UML Sequence Diagram



### UML Class Diagram



## Technical Requirements

* **Hardware:**
  + The system will run on a cloud-based server and support access from desktop computers, laptops, tablets, and mobile devices.
* **Software:**
  + The system will be web-based and accessible through modern internet browsers.
  + A secure backend will manage user date, lesson bookings, and practice test results.
  + A database will be used to store customer profiles, appointments, and scores securely.
* **Tools:**
  + Diagramming tools, such as Lucidchart, will be used for design and documentation.
  + Version control tools will assist in managing development and updates.
  + Secure certificates will ensure that all data transferred between users and the system is encrypted.
* **Infrastructure:**
  + Role-based access will control what students, instructors, and admins can see or do in the system.
  + Data will be stored securely with regular backups to prevent loss.
  + System updates and maintenance will be scheduled during off-peak hours to avoid interruptions.
  + The system will be able to scale and handle more users as needed.